

Name: _____

p1029: Box multiplication of linear binomials (v3)

Example

Use the box method to multiply $(6x + 3)$ and $(2x + 4)$.

*	6x	3	
2x	$12x^2$	6x	$12x^2 + 6x + 24x + 12$
4	24x	12	Combine like terms.
			$12x^2 + 30x + 12$

ANSWER: $12x^2 + 30x + 12$

Question 1

Use the box method to multiply $(6x + 3)$ and $(5x + 7)$.

*	6x	3	
5x	$30x^2$	15x	
7	42x	21	

ANSWER: $30x^2 + 57x + 21$

Question 2

Use the box method to multiply $(-3x + 4)$ and $(5x + 9)$.

*	$-3x$	4
5x	$-15x^2$	20x
9	$-27x$	36

ANSWER: $-15x^2 - 7x + 36$

Question 3

Use the box method to multiply $(9x - 6)$ and $(-3x + 8)$.

*	9x	-6
-3x	$-27x^2$	18x
8	72x	-48

ANSWER: $-27x^2 + 90x - 48$